Ameritech Illinois witness Dr. Korajczyk testified that Dr. Cornell utilized an erroneous procedure for un-levering and re-levering in determining the data which he utilized in his CAPM analysis. He noted that since Dr. Cornell re-levered each comparable company to a capital structure of 82% equity and 18% debt, it is inappropriate to use, as Dr. Cornell does, a capital structure of 75% equity and 25% debt to calculate a WACC. In addition, Dr. Korajczyk noted that Dr. Cornell inconsistently weighted Ameritech versus the other comparable firms in calculating the DCF and CAPM equity cost of capital. When Ameritech has a lower cost than the other comparables (the DCF analysis), Dr. Cornell gives Ameritech a weight of 25% relative to the other comparable firms. However, when Ameritech has a higher cost than the other comparables (the CAPM analysis), Dr. Cornell ascribes a weight of only 14.4% to Ameritech Illinois relative to the other comparable firms. The Company noted that although Dr. Cornell criticized Mr. Domagola's market-risk premium estimate because it relied on Ibbotson data going back to 1926, Dr. Cornell himself partly relied on data going back to 1802, which he acknowledged included even less complete data.

Ameritech Illinois also pointed out that the CAPM and DCF methodologies Dr. Cornell employed in this proceeding differed from the advice that he gives in his published textbook, *Corporate Valuation*. For example, the textbook notes that to avoid problems of data mining, the entire period from 1926 to the present should be utilized, or as a next best substitute, the post-war period from 1945 to the present. His textbook warns that finer partitioning of the sample data, even if done with the best intentions, raises the specter of introducing bias. The four historical time periods upon which Dr. Cornell in part relied in deriving his recommended market risk premium, however, contain finer partitioned periods from 1951 to 1995 and 1971 to 1995. The Company noted other inconsistencies, including Dr. Cornell's use of an annual DCF model in this proceeding as opposed to the quarterly compounding DCF model utilized in his textbook to illustrate the appropriate application of the DCF methodology, as well as Dr. Cornell's consideration of both the arithmetic and geometric average of past returns for purposes of this case, whereas his textbook advises that the best estimate of expected returns is the arithmetic average of past returns.

Ameritech Illinois also noted that in determining his risk premium, Dr. Cornell started with the S& Poor 500 Index but then limited the sample to firms that pay a dividend of at least 3%, which shrinks the sample from 500 to 50 firms. These firms are generally larger firms, and since smaller firms historically have earned higher risk premiums than larger firms, the net effect of this limitation is to hold down the risk premium. The Company Illinois maintains that because of the errors in Dr. Cornell's analysis and because he failed to sufficiently explain the significant deviations from the methodologies he advises in his published textbook, Dr. Cornell's cost of equity analysis should not be relied upon in this case.

Staff criticized Dr. Cornell's DCF analysis because it did not reflect quarterly compounding of dividends. (AT&T/MCI Joint Ex. 4.0 at 13-14). As a result, Dr. Cornell introduced a downward bias to his DCF cost of equity estimates by ignoring the fact

that investors are aware that dividends are normally paid quarterly and reflect this expectation in their required rate of return. Because of the opportunity to reinvest dividends and the time value of money, investors assign greater value to quarterly dividends than to a year-end annual dividend. (Staff Ex. 4.0, Schedules 4.03 and 4.04, Staff Ex. 4.01 at 2).

Staff also maintained that Dr. Cornell erroneously averred that using the quarterly DCF model to develop the allowed rate of return would cause the companies to earn "an effective rate higher than the allowed rate because of monthly compounding." (AT&T/MCI Joint Ex. 4.0 at 38). Ms. Nicdao-Cuyugan testified that Dr. Cornell made the unsupported assumption that utilities continuously receive positive net cash flows monthly and that they are able to reinvest those net positive cash flows consistently at a return equal to their respective cost of capital. (Staff Ex. 4.01 at 2). However, utilities experience cash outflows, collection lags, and regulatory lags which can result in negative net cash flows in certain months, adversely affecting the utility's effective earned rate of return. Moreover, even if the timing of a utility's cash flows causes the utility systematically to receive earnings in excess of investor demands, she testified that the adjustment should be made to the utility's working capital and not its cost of capital. (Id. at 3). Working capital adjustments are designed specifically to compensate the utility for differences that exist between the time it expends money to provide service and the time it is reimbursed for that service.

Staff noted that Dr. Cornell utilized a non-constant growth DCF model based on GNP growth estimates as the long-run growth rate because he believes that five-year ("short-run") analyst earnings per share ("EPS") growth estimates for telephone companies, such as 30%, are not sustainable into perpetuity. (AT&T/MCI Joint Ex. 4.0 at 14). Staff questioned his rationale. A review of the five-year analyst growth rate estimates he obtained for his sample and Ameritech do not include a 30% growth rate. Rather, his growth rates range from a low of 3.8% to a high of 14.5%, or 8.5% on average. (Ibid., Attachment BC4). Second, for a company's EPS growth rate to decline to the growth rate of the economy, as Dr. Cornell's model assumes, that company's earnings retention ratio must fall. A falling earnings retention ratio will cause Ameritech Illinois' earnings per share and dividends per share growth rates to diverge, in which case its EPS growth rate cannot be used as a proxy for its dividend per share growth rate. As the earnings retention ratio falls, the near-term dividend per share growth rate will temporarily increase above its current level until the new long-term earnings retention ratio is achieved. At that time, the dividend per share growth rate would have declined to its long-term level that will equal the EPS growth rate. Ms. Nicdao-Cuyugan testified that the present value of the near-term increase in dividends will equal the present value of the future decline in dividends. (Staff Ex. 4.01 at 3-4) As a result, the cost of common equity estimated using a high short-term growth rate in a constant DCF model will equal the cost of equity estimated using a low long-term growth rate in a non-constant DCF model. (Ibid.).

Ms. Nicdao-Cuyugan testified that both competition in the financial marketplace and regulation drive a firm's expected return on common equity (R) to equal its required return on common equity (K_e). (Ibid.). To be concerned, like Dr. Cornell, that the use of high short-term earnings growth rates will result in an upwardly biased estimate of K_e, one must implicitly assume that the R of the firms in his sample are greater than their K_e. (Ibid. at 4). This assumption would imply that telecommunications markets are both unregulated and not competitive. This is unlikely given that the impetus for telecommunications deregulation stems from the belief that competition will lower prices. Furthermore, Dr. Cornell did not demonstrate that the investor-expected R of telephone companies exceeds their K_e (Ibid.).

Commission Analysis and Conclusion

The Commission rejects Ameritech Illinois' contention that increased risks arising from the provision of unbundled network elements necessarily require, or should create an expectation of, an upward adjustment to any previously calculated cost of capital. Both the DCF and CAPM methodologies used by Mr. Domagola, Dr. Cornell and Ms. Nicdao-Cuyugan are market measures of the cost of capital. Thus the market's perception of the degree of risk confronting the Company already has been captured in these analyses. Moreover, the cost of capital determined in this proceeding is intended to be used for establishing prices for a subset of its services, primarily what the FCC characterized as "bottleneck monopoly services" which are necessary for competition. The FCC Order acknowledged that incumbent LECs are likely to face increased risks from competition which might warrant an increased cost of capital, but suggested that currently authorized rates of return were a reasonable starting point for TELRIC calculations. The FCC itself initiated an inquiry into whether the currently authorized federal 11.25% rate of return was too high given the current marketplace cost of equity and debt. Despite that, Ameritech Illinois is advocating an even higher cost of capital. Finally, we would observe that if the UNE and interconnection markets are truly as competitive as the Company suggests, then there would be little purpose in requiring the unbundling of the incumbent LEC's facilities in the first place.

The Commission concludes that the cost of equity analyses provided in this proceeding form an appropriate basis for determining the WACC for use in the TELRIC studies. The cost of equity analyses do reflect a number of technical differences of opinion between the expert witnesses. Since the evidence indicates that there are advantages and shortcomings in each of the studies presented, we must weigh all of these factors and identify which approach overall yields the most persuasive cost of equity estimate.

At the outset we agree with Staff and ATT/MCI that the 340 basis point range in Mr. Domagola's overall cost of capital is so unusually wide as to provide little support for Mr. Palmer's ultimate selection. We also are concerned with a number of specific assumptions and calculations Ameritech Illinois made in its analysis. As Staff pointed

out, there are problems with inclusion of some of the firms in Mr. Domagola's peer groups, both in the DCF and CAPM analyses. More importantly, his CAPM estimates are biased upward because they are contingent upon betas from a regression model that indicates negative alphas, which is at odds with traditional CAPM theory. Furthermore, the 1.25 beta coefficient is an outlier from other telephone holding company betas presented by Mr. Domagola and implies that the Company, which is still primarily a monopoly, is much riskier than the market as a whole. The beta is also inconsistent with betas the Company used for internal purposes. Mr. Domagola also utilized a non-constant growth DCF model which we have generally disfavored.

The record shows some relatively minor criticisms of Dr. Cornell's cost of equity analysis which are readily disposed of. Ameritech Illinois criticizes the assumption of a zero debt beta in levering and relieving raw betas in his CAPM analysis. However, as Dr. Cornell explained, incorporating a non-zero debt beta in his analysis would have an almost imperceptible impact on his recommended overall cost of capital. We also do not find persuasive the Company's argument that certain alleged inconsistencies between Dr. Cornell's analysis and his textbook suggest "data mining." A closer examination indicates that these inconsistencies are non-existent or overstated.

We are concerned however, about an apparent inconsistency in weighing Ameritech versus the other comparable firms in Dr. Cornell's calculations. The Company witness Dr. Koraczyk noted that when Ameritech has a lower cost than the other comparables (the DCF analysis), Dr. Cornell gave it a weight of 25% relative to the other comparable firms. However, when Ameritech has a higher cost than the other comparables (the CAPM analysis), he ascribes a weight of only 14.4% to it relative to the other comparable firms. In addition, he introduced a downward bias in the DCF analysis by not reflecting the quarterly compounding of dividends. He also used a non-constant growth DCF model.

Overall, we are most comfortable with Ms. Nicdao-Cuyugan's cost of equity analysis as the most reasonable and well-supported analysis presented in this record. Even Ameritech Illinois conceded that the methodologies Staff utilized to determine an appropriate cost of equity were not necessarily unreasonable, and that they did not yield results which were unreasonable for purposes of determining a weighted average cost of capital. We conclude that her cost of equity analysis should be adopted without modification.

c. Cost of Debt

Position of Ameritech Illinois

To arrive at his range of reasonableness for the Company's WACC, Mr. Domagola used a 7% cost of debt, which represents Ameritech's approximate current market cost of debt. He based that figure on the 10-year treasury bond yield of 6.6% as of October 10, 1996, plus an additional borrowing spread of 40 basis points for

telephone companies with a credit rating similar to Ameritech. (AI Ex. 7.0, at 16). As a check on the accuracy of this measure, he also obtained the yield curve from Bloomberg as of October 10, 1996 showing the relationship between the 10-year treasury and 10-year debt issued by a telephone company borrower rated AAA-AA, similar to Ameritech. This reflects a spread of 35-42 basis points for 10-year debt.

Position of AT&T/MCI

In his WACC analysis, Dr. Cornell recommended a cost of debt of 7.46%. He testified that the best estimate of the cost of debt for purposes of these proceedings is the weighted average cost of all of Ameritech's outstanding issues. He derived his data from S&P Bond Guide.

Position of Staff

Ms. Nicdao Cuyugan estimated what she considered to be the Company's marginal cost of both short-term and long-term debt. She estimated the marginal cost of short term debt to be 5.53%, based on the average yields of 1, 3, and 6-month commercial paper as of January 23, 1997. She estimated Ameritech Illinois' "marginal" long-term cost of debt based on the average cost of newly issued 30-year AAA-rated utility bonds as of January 23, 1997. That cost is 7.64%. Staff asserted that the Commission should adopt its marginal cost of long-term debt because Staff believes it reflects the incremental costs that would be incurred by Ameritech Illinois if it issued new debt. Ms. Nicdao-Cuyugan indicated that the Commission should reject Dr. Cornell's estimate because it did not reflect the incremental cost but rather the yield to maturity of Ameritech's currently existing long-term debt. She also recommended rejection of Mr. Domagola's estimate because it does not take into account the cost of long-term debt with maturities exceeding 10 years.

In its Reply Brief, Ameritech Illinois notes that neither Mr. Domagola nor Dr. Cornell felt it necessary to break down the cost of debt for purposes of calculating a WACC into long and short term debt. It also noted that, when utilizing a market-based capital structure where the debt component is substantially less than on a book basis, the results of breaking down the debt component into short and long-term debt are not likely to have a material effect on the resulting WACC.

Commission Analysis and Conclusion

We will utilize Staff's proposed cost of debt because it is conceptually consistent with the methodology we have accepted for the calculation of the forward-looking cost of capital. That proposal provides the most accurate determination of the incremental cost of new debt.

Having previously adopted Staff's proposed methodology for the determination of the appropriate capital structure, cost of equity and cost of debt, and having

determined that no adjustments are required to Staff's calculations, we conclude that Ameritech Illinois should utilize a WACC of 9.52% in its TELRIC studies.

2. Depreciation

Overview

This section presents the parties' positions on the appropriate depreciation rate assumptions to be used in Ameritech's TELRIC studies. The parties agreed that economic lives should be used to establish depreciation rates but they were unable to agree on which economic life assumptions should be used. The longer the economic lives, the lower the depreciation rate and hence the lower the cost per unit, all else being equal. Conversely, the shorter the economic lives, the higher the depreciation rate and hence the higher the cost per unit, all else being equal.

Ameritech Illinois Position

Company witness Marsh presented his recommendations for ranges of economic lives and Company witness Palmer picked the economic lives used for the Ameritech studies from the range presented by Mr. Marsh. (AI Ex. 3 at 10 and Tr. 1001-1003). The depreciation life ranges Mr. Marsh recommended were based on his review of the lives which are being used for financial reporting purposes by other telecommunications providers who provide services similar to the Company's, the recovery periods that the IRS allows for central office equipment and outside plant, and the lives permitted by the FCC for cable company cost studies. (AI Ex. 5.0 at 4 and Tr. at 981-982 and 990-991). In addition he claims that he considered numerous additional factors including, but not limited to changes in the marketplace, changes in regulation, ICC Orders, literature in the field of depreciation and recently announced technological developments. Based on his analyses, Mr. Marsh recommended economic depreciation life ranges of 5-10 years for digital electronic switching equipment, 5-10 years for digital circuit equipment, and 10-15 years for outside plant equipment. In its TELRIC studies, Ameritech Illinois used forward-looking economic depreciation lives of 7 years for digital switching equipment, 7 years for digital circuit equipment and 15 years for outside plant equipment. It asserted that these economic depreciation lives are the same as those currently used by Ameritech for financial reporting purposes. In addition, it claimed that they are consistent with the economic lives used in LRSIC studies by Ameritech Ohio (since 1991), Ameritech Michigan and Ameritech Wisconsin (since 1993) and Ameritech Indiana (since 1994).

Mr. Palmer testified that Ameritech Illinois found it necessary to shorten the depreciation lives of network elements from those used in earlier studies in Illinois to reflect the risk associated with added competition and increased demand for state-of-the-art network elements that is developing. (AI Ex. 3 at 9). Dr. Aron testified that opening the market to competition quickens the pace of obsolescence because when a

market moves from a protected monopoly to one in which entry is permitted and competition is encouraged, there will be demand by members of that industry for the most capable and efficient productive assets that are used to service the market. (AI Ex. 6.1 at 33-34). The Company maintains that the lives used in Ameritech's LRSIC studies do not adequately reflect appropriate economic life assumptions now that the passage of the Telecommunications Act has allowed competition in the local exchange market. It agreed with AT&T witness Henson's suggestion that the inputs to the TELRIC studies such as depreciation rates and cost of money should be the same for retail services on a going-forward basis.

ATT/MCI witness Majoros criticized Mr. Marsh's consideration of the FCC-established depreciation lives for the cable television industry as an input into his recommended depreciation lives. He also criticized Mr. Marsh's consideration of the IRS- allowed five-year life for switching and central office equipment, indicating that there is a difference between a recovery period and a depreciation life.

In response, Ameritech Illinois noted that Mr. Majoros conceded that technological developments could render plant obsolete and that the relevant time frame in which to consider whether a particular technology has the potential to bypass and render existing plant obsolete is the time period that is encompassed within the economic service lives the Company proposed in this proceeding. Thus, it maintains that the ability of AT&T's announced wireless technology to bypass the local exchange network within the 7 and 15-year depreciation lives proposed herein for switching and outside plant is of great importance to any accurate appraisal of the risks surrounding the UNEs at issue in this proceeding.

With regard to his consideration of the FCC depreciation rates prescribed for the cable television industry, Mr. Marsh noted that that industry is a major potential competitor group to Ameritech Illinois, which utilizes coaxial and fiber distribution networks that could be utilized for two-way telephone conversations, bypassing the local exchange network. In addition, he noted that from a methodological standpoint, the FCC asked the cable television companies what they were using for depreciation lives, then took the average and prescribed a range based on what the cable television companies themselves chose to use for their own purposes. He indicated that this was markedly different from the FCC's approach in prescribing depreciation rates in the telecommunications industry. Mr. Marsh also stated that Mr. Majoros' criticism of the IRS five-year depreciation provisions fails to discuss the possibility that the stimulating effect of the IRS rates comes from the application of an appropriate recovery period, not an overly long recovery period as previously prescribed by regulatory bodies.

AT&T/MCI also criticized the Company's proposed economic depreciation rates because it failed to conduct an independent study of the demands of new entrants for the UNEs at issue herein. Ameritech Illinois responded that the new entrants are not only its potential customers, they also are direct competitors whose goal is to capture its local exchange market. Mr. Marsh testified that these competitors are reluctant and

in fact have refused to provided demand information to Ameritech Illinois. He also noted that AT&T refused to supply such information regarding its newly announced wireless network and that this Commission denied Ameritech Illinois' attempts to compel discovery related to the technical capabilities and demands of that system. It explained that, in the face of the inability to obtain demand data from competitors, Mr. Marsh considered an array of factors which, together with his 20 years of professional experience, formed the basis for his recommended range of depreciation lives.

AT&T/MCI Position

Mr. Majoros states that the equipment lives proposed by Ameritech are not reasonable estimates of the revenue-producing lives of UNEs. He recommends that lives prescribed by the FCC for Ameritech Illinois in the FCC's 1995 annual update of its depreciation rates be used for establishing TELRIC rates. (AT&T/MCI Joint Ex. 4.0 at 4-5). He pointed to a number of indicators to demonstrate that the FCC's prescribed lives are forward-looking. He noted that in the mid-1980s, the FCC directed its staff to set lives based on forward-looking plans and technological developments. (AT&T/MCI Joint Ex. 5.0, at 5). He also pointed to the rise in the depreciation reserve level over the last decade as an indicator that the FCC's lives have been forward-looking. (Id., at 6-9). Most importantly, Mr. Majoros noted that the FCC's life prescriptions for Ameritech Illinois are significantly below Ameritech's historical life indications. Thus, if the FCC heavily relied on this data, as Ameritech asserted, it would be impossible for it to have prescribed lives so significantly below its historical life indications. (AT&T Joint Ex. 5, at 9 and Attach. 5). Mr. Majoros also disagreed with the depreciation rates proposed by Ameritech Illinois in part because he disagrees with its perception of the risks associated with added competition and increased demand for state-of-the-art elements.

AT&T witness Henson states that Ameritech has not offered any persuasive evidence of why lives should be shortened and proposes that the lives Mr. Majoros recommended be used for establishing TELRIC rates. (AT&T Ex. 1.0 at 42). AT&T and MCI pointed out that, although Ameritech claims that demand for UNEs will necessitate shorter lives. Mr. Marsh failed to conduct any study of that demand. Thus, AT&T submitted that Ameritech's lives are simply reflective of financial accounting lives that Ameritech and other telecommunications carriers used for SEC financial reporting purposes, which are based on conservative general accounting principles that have no place in a TELRIC proceeding.

Mr. Marsh replied that the FCC's simplification of its depreciation represcription practices is not evidence of a new forward-looking orientation because these simplification orders base their ranges of depreciation factors on the average of the then current FCC prescriptions for all the companies the FCC prescribes. These prescriptions do not reflect the companies' own views of the future of these accounts, but continue to reflect the FCC staff's imposed views, from which an average is then taken.

Likewise, Mr. Marsh testified that trends in depreciation reserve levels are not evidence of a new forward-looking approach by the FCC because they still are based significantly on historical data. He also indicated that accrual rates are not necessarily equivalent to projection lives and that the accrual is just one of several factors used in calculating the reserve level. He indicated that increases in the reserve do not necessarily mean that it is at the correct level, or that the FCC has set appropriate rates.

Mr. Marsh testified that Mr. Majoros was incorrect in maintaining that an accrual rate much higher than the current retirement rate indicated that the retirement rate will be much higher in the future, noting that the accrual rate contains several factors. A higher depreciation rate than current retirement rates easily may be a result of the reserve factor of the rate calculation or highly negative future net salvage rates or inadequate reserves due to inadequate previous prescriptions. For these reasons, he indicated that no conclusion can be drawn about retirement rates simply by reviewing the movement of the reserve.

Mr. Marsh also disagreed with Mr. Majoros's contention that Ameritech Illinois' proposed depreciation rates will collect an unwarranted capital contribution from new entrant carriers, claiming that Mr. Majoros confuses capital contribution with capital recovery.

Staff Position

Staff witness Hendricks states that economic life is a measure of how long the equipment can be used before it becomes obsolete or inadequate. He opines that equipment should be considered obsolete if there is a technologically improved or more economically efficient type of equipment to replace it. Equipment should be considered inadequate if it lacks the ability to handle an increase in demand and therefore needs to be replaced with equipment that can handle that increase. (Staff Ex. 5.00 at 4). Mr. Hendricks is not convinced that Ameritech's elements will become obsolete or inadequate in the foreseeable future and states there is no justification for Ameritech's proposal to decrease the economic lives of equipment. (Staff Ex. 5.0 at 10 and Staff Ex. 5.02 at 11). He noted that in Docket 92-0448, the Commission accepted Staff's recommendations with respect to the establishment of depreciation lives for four major Ameritech accounts. Staff concluded that Ameritech's own demand forecasts indicate that it expects demand for UNEs to increase, although not to the point where demand would outstrip capacity. Based on those demand forecasts, Staff further concluded that its equipment and plant relating to UNEs is neither obsolete (since expected demand is increasing) nor inadequate (since demand is not so great that its current equipment could not handle the expected volume). Since Ameritech's own demand forecasts indicate that its plant and equipment face neither obsolescence nor inadequacy, Staff submitted that its proposed lives are too short. Staff Ex. 5.00, at 9-13).

Staff witness Gasparin agrees with Ameritech that the Telecommunications Act does provide a framework for competition in the local exchange but concludes that the rates ordered by the Commission in Docket 92-0448 are still appropriate because local exchange service remains the domain of the LEC. Staff recommends that Ameritech use the lives ordered by the Commission for the Company's LRSIC studies in Docket 92-0448/93-0239 for establishing TELRIC rates because these lives are based on an economic life analysis and are appropriate from a policy perspective. (Staff Ex. 5.00 at 13-14, Staff Ex. 5.01 at 3, Staff Ex. 5.02 at 10). These recommended lives are 18 years for digital electronic equipment, 13 years for digital circuit equipment and from 5.3 to 65 years for outside plant. The depreciation life for aerial fiber optic cable was not established in that docket, so Mr. Gasparin recommends that a depreciation life of 27 years be established for aerial fiber optic cable in this docket. (Staff Ex. 6.02 at 17 and 18).

Staff maintained that the depreciation lives that the Commission established in Docket 92-0448 are forward-looking because they consider the possibility of obsolescence. As the FCC states in paragraph 702 of its FCC Order, the incumbent LECs' elements are bottleneck, monopoly services, that do not now face significant competition. Staff maintains that Ameritech Illinois has not offered any persuasive evidence to suggest its elements are not bottleneck facilities or that it should be allowed to use different depreciation rates than the rates already approved by this Commission.

Ameritech Illinois countered that the proceedings in Docket 92-0448/93-0239 were initiated approximately five-years ago and that such rates cannot possibly comply with the forward-looking cost methodology and standards contained in the Act and the FCC Order. Mr. Marsh noted that the average life prescriptions that the Commission established in that Docket relied in part upon the 1991 FCC prescription of depreciation rates for Ameritech Illinois and that this six-year old prescription has been superseded at least twice. He also indicated that the Staff recommendations are based upon the historical physical life of the plant, as evidenced by Mr. Hendricks' reliance upon the 1993 recommendations of Mr. Gasparin and the 1991 FCC prescription of federal depreciation rates. In both cases he noted that these dated studies deal with the total investments in each of the Part 32 accounts maintained for Ameritech Illinois by the FCC, rather than the latest and most efficient equipment which the TELRIC methodology requires to be utilized in cost studies supporting UNE pricing. In addition, Company witness Dr. Aron testified that even if the FCC's 1995 prescriptions were correct at the time, they could not possibly be correct today, because they could not include consideration of the passage of the Act itself and the FCC orders implementing it, which are designed to stimulate and promote competition. Nor could they consider the fact that opening the market to competition quickens the pace of obsolescence and the fact that Ameritech Illinois' obligation to provide UNEs to its own competitors involves a significant risk of stranded plant, because the investments that it will have to make in order to satisfy its duties under the Act are substantially different in nature than

the investments that it has made in the past, and there is no continuing obligation on the part of its competitors to purchase the UNEs at issue herein.

Commission Analysis and Conclusion

While it is true that under the alternative regulation plan approved in Docket 92-0448 the Commission granted Ameritech Illinois the freedom to establish its own depreciation rates, we rejected the recommendation of the Hearing Examiners and expressly reserved control over those rates for cost study purposes. The Company's nearly total reliance on the service lives used for financial reporting purposes is therefore inconsistent with that decision and is misplaced. We do not believe that financial accounting lives are a suitable proxy for economic lives, as they are often driven by corporate financial objectives, and reflect accounting rules biased toward conservatism.

We are unwilling to adopt Ameritech Illinois' ill-defined and largely judgmental calculations of economic lives and abandon the traditional engineering and economic principles which we have utilized in the past. The specifics of the Company's proposal are not supported by a sufficient quantum of evidence. Although it asserts that service lives must be shortened in order to ensure that they are consistent with the new competitive environment, it provided very little hard evidence justifying either the range prepared by Mr. Marsh or the actual depreciation economic lives Mr. Palmer selected. For example, Ameritech Illinois proposes an economic life of 30 years for poles, which is down from 39 years in current LRSIC studies. It provides no explanation for this change which we can evaluate. Have there been exciting new developments in telephone pole technology? Does it expect its poles to break under the weight of its competitors' attachments?

Even if we agreed with the Company's argument that new entrants will increase the demand for "state of the art" network elements, we do not have a sufficient basis for concluding that that justifies the drastic revisions to the service lives used in its current cost studies. While we have some sympathy for the complaint that it has difficulty obtaining information from its potential competitors, that is no excuse for the almost total absence of corroborative factual evidence. Mr. Marsh did not share the content of any discussions he may have had with Ameritech planners, he conducted no independent UNE demand study, he did not review the demand forecasts used in its TELRIC study, he did not identify a single new technology demanded by new entrants nor did he consult with its engineering group to determine appropriate economic lives for digital switching, digital circuit and outside plant.

We think it is reasonable to expect that if the new competitive environment is truly creating changes in the economic lives of the Company's plant assets it would be reflected in its own internal operations. For example, if the economic life of a digital switch is now seven years instead of the eighteen years approved for LRSIC studies, then Ameritech should be able to show a dramatically accelerated replacement

schedule for those switches consistent with the new economic life. It did not. If new entrants are demanding state of the art functionalities, then Ameritech should be able to show examples, and demonstrate the effects and time frames involved. It did not.

Rather than present detailed evidence in support of its proposal, Ameritech Illinois prefers to whine repeatedly about this Commission's refusal to permit it, at the very end of the evidentiary proceedings, to conduct extensive discovery regarding AT&T's wireless technology announcement. The FCC Order suggests that TELRIC prices should be based on the use of the most efficient telecommunications technology currently available and the lowest-cost network configuration, given the existing location of the incumbent LEC's wire centers. Ameritech concedes that AT&T's technology is still in the testing stage, but it asserts that it is appropriate to evaluate a seven-year horizon, and therefore an evaluation of the announcement is relevant to the establishment of depreciation rates. We disagree. First, the information was sought far too late in the proceeding to permit a fair and meaningful evaluation of whatever data may exist. Second, it would be inappropriate and highly misleading to focus on a single firm's technology and market entry plans as they may (or may not) affect the economic lives of Ameritech Illinois' plant assets without also considering the numerous other potential entrants which may require UNEs and interconnection. (As an aside we note that PCS providers have not, as yet, participated in Commission proceedings). Third, if we attempted in this proceeding to establish depreciation rates based on some assessment of what market conditions may look like seven years from now, we could obtain the same likelihood of accuracy by consulting tea leaves. We do not believe that "forward-looking" is synonymous with "gross speculation." We certainly cannot infer that the Company's proposed depreciation lives are appropriate on the basis of its hyperbolic claim that AT&T's technology may obsolete Ameritech's network overnight, nor can we accept the argument that if we do not adopt its proposal we are somehow interfering with its relationship with its shareholders.

We do share the Company's concern that the depreciation rates approved in the alternative regulation proceeding are now somewhat dated and do not adequately reflect consideration of more recent marketplace and regulatory developments which may have had some impact on economic lives. These developments should be accorded some weight in the selection of appropriate depreciation rates used in a forward-looking TELRIC study. Accordingly, we will not adopt Staff's suggestion to use the projection lives adopted in Docket 92-0448.

We believe that the projection lives and future net salvage percentages underlying the depreciation rates prescribed for Ameritech Illinois by the FCC as set forth in the FCC's annual update of depreciation rates should be used in the TELRIC calculations. (FCC 96-22 adopted January 25, 1996). They reflect the most recent credible and comprehensive evaluation of depreciation in the record. We are persuaded by Mr. Majoros' testimony that the FCC projected lives are reasonably forward-looking. We note that the FCC has stated that they are based on a detailed analysis of each carrier's most recent retirement patterns, the carrier's plans, and

current technological developments and trends. Indeed, Mr. Majoros demonstrated that the FCC's prescribed projection lives are significantly shorter than Ameritech Illinois' recent historical indications. Contrary to the suggestion that the rates are based on the FCC Staff's views of the marketplace, Ameritech has had the opportunity to participate fully in the development of the FCC's rates. We recognize that the FCC has expressed some general reservations as to whether its represcription process adequately reflects the nascent competitive environment, but we have no evidence which suggests that any shortcomings which the FCC may perceive are likely to lead to, or require, the drastic changes in service life assumptions advocated by Ameritech Illinois.

3. Fill Factors

This section of the Order presents the parties' positions on the appropriate utilization assumption to be used in Ameritech's TELRIC studies. Unit costs are derived from total costs in the TELRIC methodology by dividing the total cost associated with the element by a utilization assumption ("fill factor"). Fill factors represent an estimate of the proportion of a facility that actually will be used by customers for network access. The higher the fill factor, the lower the unit cost of the element, all else being equal. Conversely, the lower the fill factor, the higher the unit cost of the element, all else being equal. Three different approaches to fill factors have been identified in this case: actual, usable capacity and target fill factors.

The FCC Order addresses the issue of the appropriate fill factors to be used in TELRIC studies. The FCC suggests that: "Per unit costs shall be derived from total costs using reasonably accurate "fill factors"; that is, the per-unit costs associated with the element by a reasonable projection of the actual total usage of the element.

Position of Ameritech Illinois

Ameritech Illinois applied fill factors to calculate investment costs for loops and other unbundled network elements and services. Prior to the 1996 Act, the Company says it employed usable capacity fills in retail service cost proceedings. For many elements in its TELRIC study it used fill factors which were identical to the LRSIC fill factors but for others (primarily loops and ports), it made modifications.

Company witness Palmer recommends using a target fill factor as the network utilization assumption for the TELRIC studies instead of the usable capacity assumption used for the LRSIC studies He defines a target fill factor as the optimal usage level above which it is more cost effective to add plant and capacity than to increase the utilization of the existing plant (AI Ex. 3.1 at 15). The Illinois Cost of Service Rule defines usable capacity as the maximum physical capacity of the equipment or resource less any capacity required for maintenance, testing, or administrative purposes. (83 Illinois Administrative Code Part 791.20(n)). Ameritech maintains that its target fill factors for most elements are less than the usable capacity

The Company first made a "fresh look" adjustment to its usable capacity fills based on its position that usable capacity fills would shrink as the network capacity required for maintenance, testing, and administrative purposes increased due to the rise in unbundling and churning expected in the wake of the Act. It later made an additional adjustment to arrive at its target fill factor proposal after the FCC issued its cost rules in its FCC Order, which Ameritech says prescribed the use of "reasonably accurate" fill factors. According to the Company, its target fill factor modifications reflected the qualitative change in methodology from usable to reasonably accurate fill. It asserts that it kept its TELRICs conservatively low by using target fill factors higher than the actual fills it believes were authorized by the FCC. (AI Ex. 3.1 at 14-15). It asserts that if it had used actual fills, its calculated costs would have been higher.

Position of Intervenors

AT&T witness Henson states that Ameritech's assertion that the modified fill factors reflect efficient network use is directly contradicted by its own operating guidelines. (AT&T Ex. 1.0 at 43). The target fill factors deviate from the usable capacity fills set forth in Ameritech's own LRSIC methodology as contained in the Ameritech Cost Analysis Resource (ACAR). He recommends that the Commission order Ameritech to use the fill factors it presently uses in LRSIC studies. (AT&T Ex. 1.2 at 20). AT&T and MCI assert that the ACAR sets forth the pricing guidelines that must be used so that the services makes money. They observe that the ACAR's definition of LRSIC contradicts its insistence in this case that fill factors contained in the ACAR reflect theoretical utilization levels which do not reflect actual operating conditions. In fact, they note that the ACAR defines usable capacity as the "maximum physical capacity of the equipment or resource less any capacity required for maintenance testing or administrative purposes." Id., Tab 3, at 4. Thus, AT&T and MCI maintain that the usable capacity fill factors in the ACAR represent the appropriate fill factors to account for administration, maintenance and testing in a forward-looking, most efficient network as determined by Ameritech's own engineering experts.

AT&T and MCI also point to a document titled "Ameritech Engineering General Letter AMGLCSI-00168, December 1992, Target Percentage Fill for Digital Switches." That document (in evidence as AT&T Cross Ex. 3P) discusses the rationale for increases in the fill factor for digital switches from 95% to 97% for use in Ameritech's LRSIC study. (AT&T Cross Ex. 3P, at 2). That letter also indicates that utilization was increased to position Ameritech as a competitive low cost unit provider and to keep a high percentage of usage. AT&T asserts that Ameritech's own documentation and testimony demonstrates that its LRSIC methodology is forward-looking and reflects the most efficient mode of operation. AT&T and MCI also maintain that the FCC Order and the Commission's Cost of Service Rules do not permit the use of actual fill factors They contend that actual fill levels are simply antithetical to a forward-looking, efficient network.

AT&T witnesses also questioned Ameritech Illinois' motivation, given the timing of the target capacity fill factor adjustment. For example, Mr. Henson points out that Ameritech performed calculations based on the "fresh look" fill factors which gave its TELRIC UNE prices in late June 1996. (AT&T Ex. 1.0, at 44; Tr. 276). These "fresh look" fills for feeder and distribution facilities were reduced just one month later, although it is highly unlikely any major new engineering developments occurred during this one-month period. More likely, according to Mr. Henson, Ameritech Illinois was experimenting with input factors in order get a sense of the relationship between fill factors and the corresponding cost study results. (AT&T Ex. 1.0, at 44). AT&T also questions the Company's motives because it began recalculating its TELRIC studies using the target capacity adjustments prior to issuance of the FCC Order.

AT&T and MCI further maintain that Ameritech has misapplied the per unit formulas contained in the FCC Order and the Illinois Cost of Service Rules. These parties object to the contention that if it can calculate the additional number of access lines it expects to service over the period of the study, it can include that investment in its TELRIC calculations. They argue that under the FCC Order and the Commission's Cost of Service Rules, Ameritech has two obligations it must meet in order to include additional spare capacity investment in its TELRIC studies. First, it must substantiate the level of reasonably foreseeable capacity that it includes in that investment number (i.e., how many additional lines are reasonably foreseeable). Second, in calculating its per unit cost, it must divide that investment figure by a reasonable projection of the sum of the total number of units of that element that the ILEC is likely to provide to requesting carriers and the total number of units of that element the ILEC itself is likely to use in offering its own services. (See 83 Ill. Adm. Code, Parts 791.40 and 791.70; FCC Order 682). AT&T and MCI maintain that Ameritech has not properly implemented this standard because it has not used projected working pairs, only current working pairs. They argue that by including growth-related spare investment, but not identifying the reasonable projection of usage for which it was calculating investment, Ameritech Illinois has selected only part of the equation set forth by the FCC and this Commission. They also maintain that when applied properly, the FCC Order and the Commission's Cost of Service Rules require the removal of growth-related spare capacity related to maintenance, testing and administrative purposes.

Ameritech Illinois responds that there is nothing "suspicious" about how it modified the fill factor assumptions to comply with the emerging unbundled environment and FCC regulations. It argues that the AT&T brief reads as if there were no 1996 Act and insists on models which were developed prior to the Act for altogether different purposes. It also maintains that although Staff and AT&T/MCI argue that the FCC's reasonable projection language does not encompass Ameritech Illinois' actual fills, they offer no reason to believe that its actual fills do not represent a reasonable projection going forward, especially since actual fills are likely to decrease as competition develops. It avers that actual fills always should be less than target fills because a target fill represents the point at which network capacity is increased.

thereby reducing the portion that is actually utilized. Ameritech believes it has taken a conservative approach.

With respect to Dr. Ankum's arguments, Ameritech Illinois contends that he is proposing an illogical unit cost formula in which both the numerator and denominator include a projection of usage that allows for growth-related spare capacity. It argues that the effect would be to preclude the recovery of investment in spare capacity, much of which is intended to serve current, not future customers.

Position of Staff

Staff witnesses Gasparin and Hendricks present target fill factors that Staff considers to be forward-looking reasonable projections of efficient network fill. It maintains that these target fill factors are efficient because at levels above the target fill it would be more cost efficient to add new plant than to continue to operate at higher utilization levels. (Staff Ex. 5.02 at 5). Staff's target fill factors are equal to Ameritech Illinois' "fresh look" (or engineered utilization) factors. (Staff Ex. 6.02 at 14). Staff recommends that the Commission order Ameritech to use Staff's recommended target fill factors for interim use in establishing TELRIC prices because these target fill factors represent the most efficient network utilization assumptions presented in this proceeding. (Tr. at 2041).

However, Mr. Hendricks states that Staff's target fill factors are not consistent with the "reasonably accurate fill factors" prescribed by the FCC for its TELRIC methodology because the target fill factors are not a reasonable projection of network usage given current levels of network usage. (Staff Ex. 5.02 at 5). Therefore, Mr. Hendricks states that in the long term a reasonable projection of anticipated network usage should be used in setting fill factors. (Staff Ex. 5.02 at 6 and Tr. at 2041). Mr. Hendricks states that a pricing methodology which uses a projection of network fill will recover the full costs of deploying network facilities since spare capacity will be included in the prices. He states that all carriers should contribute to the cost of spare capacity since all carriers enjoy the benefit of having spare capacity available to meet demand. (Staff Ex. 5.02 at 6). Mr. Hendricks stated that if the Commission decided to use reasonable projection estimates for fill factors, he would be willing to work with all the parties involved in this proceeding to come up with a methodology for determining reasonable projections. (Tr. at 2045). Staff urges the Commission to reject Mr Palmer's claim that current actual fills are the same as reasonable fill projections because current is not synonymous with projection

Commission Analysis and Conclusion

We are unwilling to conclude that the process of establishing TELRIC based prices for UNEs represents such a unique activity that it renders the existing cost of service rules codified at 83 Ill. Adm. Code 791 irrelevant in this proceeding. However, we also do not believe that the methodologies described there should be conclusive.

Based on our evaluation of the evidence on this issue, we cannot reconcile the FCC Order with the cost of service rule as readily as ATT/MCI suggest. Regardless of what some isolated passage in Ameritech Illinois' internal manual may say about what its author believes the process will or won't ultimately achieve, the determination of fill factors was designed to be in compliance with our cost of service rules. Section 791.70 provides:

> Utilization factors. The utilization factor measures the usable capacity of a capital resource pursuant to the definition of usable capacity in Section 791.20(n). Investment shall be adjusted to reflect the usable capacity by dividing the dollar amount of investment by the utilization factor estimated pursuant to this Section.

Section 791.20 provides:

> Usable capacity is the maximum physical capacity of the equipment or resource less any capacity required for maintenance, testing or administrative purposes.

We note that the Company's LRSIC studies have been reviewed in numerous proceedings and we are unaware of any claims that its utilization factors measured something other than the "usable capacity" which our rule requires. Therefore, a conclusion at this time that "maximum physical capacity" is the same as the FCC's "reasonable projection of the actual total usage of the element" seems completely unwarranted. At a *minimum*, the *change* in the suggested *measurement* warrants a reexamination of the proper measure of fill factors to be used for TELRIC pricing.

We also find nothing particularly troubling about the timing of the Company's adjustments. First, it is not surprising that it would review existing cost studies in preparation for an upcoming pricing docket. The fresh look adjustment was based on perceived changes in capacity required for maintenance, testing and administrative purposes and, although the merits of the adjustments may be disputed, they do fall squarely within the definitions in the cost of service rule and are therefore fair game Second, while AT&T/MCI correctly note that the second round of modifications, the target fill adjustments, were made prior to issuance of the FCC Order, Mr. Palmer explained that it resulted from ongoing discussions with the FCC (Tr. 304-305). The parties are advised that, in general, we prefer to focus on the merits rather than the motivations.

Nevertheless, we note the sobering analysis provided by AT&T witness Webber who showed that Ameritech's TELRIC-based rates for certain UNEs are nearly double the LRSIC it computed over the recent past. A significant portion of this differential results from the proposed fill factor reductions. (AT&T Ex. 2.2P). This highlights the importance of insisting that fill factor assumptions be supported by adequate evidence

We will adopt "target" fill factors as suggested by Mr. Palmer, because we agree with him that TELRIC- based prices are reasonably based on the "optimal usage level above which it is more cost effective to add plant and capacity rather than increase the utilization of the existing plant." We are not persuaded that AT&T's and MCI's preference for the LRSIC standard of usable capacity adequately reflects this important efficiency factor. In addition the difference between usable capacity and target capacity provides capacity to meet growth. When the target is reached more capacity needs to be added.

On the other hand, we also do not believe that the Company has adequately supported the magnitude of its proposed changes. Just as it did with regard to its depreciation assumptions, Ameritech Illinois' case regarding fill factors can best be summarized as "things have changed, here are the new numbers." The lack of clarity in the proposal is amply demonstrated by the fact that it was not until the surrebuttal stage of the proceeding that Staff witness Hendricks realized that the Company was not basing its analysis on the TELRIC methodology outlined in the FCC Order, but was using target utilizations based on engineering estimates of efficient network utilization (Staff Ex. 5.02 at 2).

Apparently in recognition of the paucity of evidence it has provided, Ameritech in its Reply Brief suggests the novel concept that as long as it provides to other parties during discovery the workpapers underlying its calculations, it is the other parties which must present evidence rebutting its methodology. The Company apparently has forgotten that under the Illinois Public Utilities Act, it and it alone, bears the burden of proving that proposed rates are just and reasonable.

We will use the target fills that Staff proposed. We note that Staff reviewed the same data relied upon by Ameritech Illinois to develop the targets. Furthermore, Staff used the same standard that Mr. Palmer proposed which we quoted above. Staff's analysis was essentially unrebutted. We believe that the change in methodology from usable capacity to target capacity will take into account the emerging unbundled environment appropriately and adequately

We are not persuaded that an additional proceeding to consider methodologies for determining projections of actual use would be beneficial. The "projections of actual use" approach was clearly identified in the FCC's Order in early August 1996, and neither Ameritech Illinois, ATT/MCI, Staff nor any other party chose to develop a fill factor proposal based on that measure We are extremely concerned about numerous rounds of litigation regarding the same subject matter. If local exchange competition is to develop, potential competitors require a stable pricing environment within which to develop business plans. That will not be possible if we are relitigating significant assumptions underlying prices.

We are also persuaded that Ameritech's unit cost formula has been applied properly Contrary to AT&T/MCI's contentions, there is nothing in the FCC Order or our

cost of service rules which can reasonably be interpreted as requiring that all growth-related spare capacity be removed from TELRIC rates.

As noted by AT&T witness Webber, the adoption of cost of capital, depreciation economic lives, and fill factors which vary from those used by Ameritech Illinois in its TELRIC studies will necessitate the recalculation of the annual charge factors using the new assumptions. The recalculated ACFs along with the modified fill factors should then be substituted as inputs into the TELRIC studies as replacements for the ACFs and fill factors which Ameritech proposed.

It is ironic that Ameritech Illinois suggests that in its future LRSIC studies it should utilize the same assumptions regarding cost of capital, economic lives, and fill factors as are adopted here. We reject the suggestion at this time. Ameritech Illinois has repeatedly taken the position that the LRSIC studies serve an entirely different purpose than the setting of UNE prices, and has proposed significant modifications to the methodologies we have used in the past to determine input assumptions. Indeed, we have departed in a number of respects from our existing approach. The methodology for conducting the LRSIC cost studies has been established by rule and is applicable to all telecommunications carriers. All interested parties should have an opportunity to respond to any changes to the rule which may be necessitated by our decisions in this proceeding.

C. Shared and Common Costs

Position of Ameritech Illinois

Ameritech Illinois retained the international accounting and consulting firm of Arthur Andersen ("Andersen"), a part of Andersen Worldwide, to identify and assign shared and common costs associated with Ameritech Illinois' provision of interconnection, UNEs, and local transport and termination. As Ameritech Illinois witness Broadhurst explained, Andersen developed a methodology for analyzing and attributing shared and common costs that it believed was consistent with the FCC Order. Andersen defined "shared costs" to be those costs incurred to provide two or more UNEs (including collocation and local transport and termination services) but which are unrelated to products and services that are not UNEs. It defined "common costs" to be those costs that are incurred to operate the business as a whole and are not directly associated with any individual UNEs, products or services or any groups thereof. Mr. Broadhurst states further that shared costs are synonymous with the term joint costs used by the FCC. (AI Ex. 4.0, p. 3). Andersen attributed shared and common costs, once they were identified, to individual UNEs (including collocation and local transport and termination services) based on measures of cost causation when available, or on accepted allocation methods when measures of cost causation did not exist.

Based on interviews of Ameritech personnel and its analysis of Ameritech's operations, Andersen determined that shared and common costs attributable to UNEs originated primarily from four business units serving wholesale customers of Ameritech: Ameritech Information Business Services (AIIS) serving wholesale customers of Ameritech Local Exchange Services and Products; Network Services, the business unit that plans, constructs, operates, maintains and manages Ameritech's integrated wireline telecommunications network; Centralized Services, which provides to Ameritech Illinois and other Ameritech entities administrative and other services on a centralized basis; Corporate, the headquarters group that provides Ameritech Illinois and other Ameritech affiliates services such as finance, legal, and investor relation services. (AI Ex. 4.0, p. 4).

Mr. Broadhurst stated that the FCC specified that shared and common costs are to be forward-looking, and Ameritech concluded that shared and common costs for calendar year 1997 were most consistent with this requirement. Additionally, Mr. Broadhurst indicated that Ameritech Illinois had not completed its 1997 budgets at the time Arthur Andersen prepared its study, so preliminary 1997 budgets were used. He stated further that 1996 actual year to date expenses were used as a basis for breaking down 1997 Network Services Budget to the level of detail required by Arthur Andersen's analysis. (AI Ex. 4.0, p. 5). He said that Andersen did not perform an "independent" evaluation of the efficiency of Ameritech' operations as part of its analysis of the 1997 budget data, concluding that numerous other factors ensured that the data reflected efficiently-incurred costs.

Arthur Andersen then conducted more interviews with Ameritech personnel and performed analyses to assign 1997 projected costs into 7 categories:

1. Volume sensitive costs already reflected in TELRIC studies of individual UNEs.
2. Non-volume sensitive costs not included in TELRIC studies of individual UNEs.
3. Costs directly attributable to retail services.
4. Costs directly attributable to non-UNE wholesale services.
5. Costs shared among UNEs.
6. Costs shared among wholesale services, including UNEs.
7. Costs common to UNEs, wholesale and retail services.

Costs in categories 1-4 were not allocated as shared and common costs. Category 2 costs were added to TELRICs, but not to shared and common costs. Categories 5-7 were apportioned to UNEs. (AI Ex. 4.0, p. 9). Ameritech Illinois also maintains that Andersen also excluded from its analysis any capital-related costs of fixed assets contained in the four organization budgets reviewed, even though some of those costs likely would have been classified as common costs on further analysis.

Category 5 costs were attributed to individual UNEs by applying to those costs a ratio for each UNE consisting of the "extended TELRIC" of the individual UNE divided by the "extended TELRICs" of all UNEs. The "extended TELRICs" were calculated for each UNE by multiplying the TELRIC volume-sensitive unit cost of the UNE by the forecasted 1997 demand in units for that UNE. For Category 6 costs, Andersen first divided these costs between UNEs as a group and other AIIS wholesale products and services, based on the relative expenses of such categories occurring within AIIS. The resulting shared costs assigned to UNEs as a group were then further attributed to individual UNEs in the same manner as Category 5 shared costs. For Category 7 costs, or common costs, Andersen first divided these costs between Ameritech' retail and wholesale business units based either on measures of cost causation or the relative total expenses of the pertinent products and services, as applicable. The common costs assigned to wholesale products and services (AIIS) were then further attributed to UNEs in the same manner as Category 6 shared costs.

With respect to unbundled loops, Category 5, 6, and 7 costs were first attributed to unbundled loop UNEs for each of the five Ameritech states based on the respective "extended TELRICs" of all unbundled loops in each state, divided by the "extended TELRICs" of all UNEs regionwide. These state-specific, aggregate unbundled loop shared costs were then further assigned to each type of loop within the state and among loops in each of the state rate zones (for Illinois, rate zones A, B, and C) using an equal dollar amount per loop, computed by dividing the state-specific aggregate costs by the total number of forecasted unbundled loops for the state. On average, Ameritech Illinois' allocation of shared and common costs to UNEs is 29 percent of the "extended TELRIC." (AI Ex. 4.0, p. 14)

Intervenor Positions

AT&T and MCI maintain that the Andersen study should be rejected based on legal considerations and/or upon implementation errors. They argue that under both the Local Service Rules and the FCC Order, all claims by incumbent LECs seeking to recover shared and common costs must clear three hurdles. First, such claimed costs must be based on a forward-looking methodology. ICC Cost of Service Rules §791.20(c). Second, all shared and common costs must be capable of "reasonable allocation." FCC Order ¶ 696. Finally, they say costs must not be unduly discriminatory, citing to Act § 251(c)(2) and (3), and the Ill. Public Utilities Act §§ 9-101 and 9-241. AT&T and MCI claim that the Andersen study fails to clear any of these hurdles.

According to AT&T and MCI the Andersen methodology for identifying and attributing shared and common costs is not forward-looking in accordance with the FCC's TELRIC methodology and the Commission's Local Service Rules, because it used Ameritech's own 1997 projected budgets. AT&T and MCI posit that in some instances Andersen had to fill gaps in Ameritech's projected budgets by using information from 1996 budgets. (Tr. 650-51). AT&T and MCI assert that even if the

Andersen study used only 1997 projected budgetary information, such costs, in order to be truly forward-looking, would have to exclude one-time expense items which are not likely to reoccur. However, they observe that Andersen failed to examine the projected 1997 budget data to see if costs were included which would not reasonably be expected to reoccur on an annual basis. Mr. Henson testified that 1997 budget data does not account for the fact that overheads for all competitors will be reduced as the market becomes more competitive.

AT&T and MCI also claim that taking the next operating budget without analyzing whether those costs would be incurred using the latest technologies results in nothing more than a projected embedded cost study, which is specifically prohibited by the Section 252(d)(1) of the Act. (MCI Exhibit 2.0, pp. 71-73). Dr. Ankum claimed that a forward-looking telecommunications system today could expect costs to be 30 percent below historic levels, leading to the conclusion that forward-looking companies have lower shared and common costs. (MCI Ex. 2.0P, p. 78). He further contended that because the efficiency criterion was ignored, the Andersen study overestimates the true shared and common costs of Ameritech by at least 20 percent. (Id., p. 79).

AT&T and MCI argue that a number of the shared costs allocated to UNEs are unreasonable and in violation of the Commission's Cost of Service Rules. Dr. Ankum objected to certain costs which he believes should have been eliminated from the allocation process because the costs, based on the title of the employees performing the work, are retail-related. (Id., pp. 94-106). AT&T and MCI also identified the salaries, benefits, and other employee related expenses for personnel who Ameritech claims supply services solely for unbundled elements in the AIIS business unit. They allege that these employees were simply designated by Ameritech personnel from headcount charts, and assigned to unbundled elements for shared cost purposes. (Id., p. 108) They also claim Andersen did not undertake an in-depth independent review of the direct assignments, amount of dollars in the budgets, and personnel assigned to the various supervisors. They maintain that some 17.95 percent of the wages, benefits, and other associated costs from AIIS were misallocated as joint costs directly to UNEs. (MCI Ex. 2.0, pp. 97-99). Another misassignment of costs to UNEs in the AIIS budget, according to Dr. Ankum, involves the allocation to joint costs of all computer-related expenses for all new AIIS employees, not just those employees serving unbundled elements. (Id., p. 112).

Similar misallocations occurred in almost every business unit according to AT&T and MCI. In the Corporate business unit budget, the amount which was directly assigned to UNEs reflects the sum of the corporate strategy department, the public policy department, and the corporate legal department. Dr. Ankum maintains that the expense descriptions reveals nothing to distinguish these assignments directly to UNEs (Id., pp. 112-15). Dr. Ankum recommends moving these expenses over to common costs to be shared by all. (Id., p. 113).

AT&T and MCI argue that the corporate legal department costs directly assigned to UNEs are totally inappropriate and should be removed entirely. The bulk of these expenses are outside counsel fees related to arbitrations, statements of generally available terms and conditions, tariff filings and associated cost proceedings, and the resulting litigation. AT&T and MCI then argue that the corporate legal department expenses are an unreasonable assignment to UNEs for a number of reasons. (Id., pp. 114-16). First, these expenses are not forward-looking. Next, the costs of implementing the Act, particularly the legal costs of implementation, cannot solely be the burden of unbundled elements. A final reason is one of fundamental fairness. AT&T and MCI explain that during the arbitrations to open the market to competition, Ameritech took positions largely viewed as hostile to the new entrants. To make new entrants, who have paid their own legal expenses in the arbitration proceedings, turn around and fund their opposition's legal expenses is inequitable. For all of these reasons, AT&T and MCI suggest excluding from both shared and common costs the entire assignment of expenses associated with the corporate legal department.

AT&T and MCI also object to the shared cost assignment from the Ameritech Operating Companies (AOC)/State Administrations unit. These consist of consultant fees and wage and benefit costs. (MCI Ex. 2.0P, p. 103). Because the consultant fees are obviously one-time expenses related to implementing the provisions of the Act, Dr. Ankum recommends removing them from the shared costs category. (Id., pp. 103-04). The remaining wages and benefits which have been assigned as shared costs to UNEs are also suspect. Therefore, Dr. Ankum suggests reassigning these latter public policy expenses to common costs. (Id., pp. 106-07). AT&T and MCI maintain that the legal expenses associated with AOC/State Administrative unit should be excluded from recovery as a shared cost. (MCI Ex. 2.0P, pp. 103-05). In total, Dr. Ankum contends that these exclusions and reassignments result in a shared cost mark-up for Ameritech's extended TELRICs of 6.06%, rather than the 17.5 percent proposed by Andersen (Id., pp. 106-107).

AT&T and MCI also contend that many of the common costs assigned to UNEs are unreasonable because both the methodology used to identify items for assignment as well as the allocation methodology are flawed. The most obvious offenders which should be excluded from common costs include the expenses associated with the Ameritech Senior Golf Tournament, the sky boxes at various sporting arenas, the Museum of Science and Industry in Chicago, the Ameritech Cup expenses, the performances at the White House and other corporate charitable contributions. (MCI Ex. 2.0P, pp. 109-110; AT&T Ex. 1.0P, pp. 57-59). AT&T and MCI reason that such promotional advertising and corporate charitable contributions would have been rejected by this Commission had Ameritech tried to recover such items in a rate case.

Dr. Ankum also maintains there are misallocations among the four business units (Network Services, AOC/State Administration, Corporate, and AIIS) which serve as a source of common costs. Some examples of misassigned expenses include retail expenses related to printing Ameritech's customers bills, items related to handling

return mail, duplicate billing and special bill processing, and remittance of Ameritech customer bill payment. (MCI Ex. 2.0P, pp. 110-111). These retail related expenses were not identified in the Andersen study, according to AT&T and MCI, due to the lack of a comprehensive study. As support for this assertion, AT&T and MCI point to the workpapers to support the proposition that only one memorandum went out to the various Ameritech departments and that memorandum requested that departments identify costs associated with unbundling operations. (MCI Cross Ex. 3P; Tr. 741-42).

AT&T and MCI next challenge the allocation scheme for the assignment of common costs to UNEs. (MCI Cross Ex. 3P; Tr. 741-42). AT&T and MCI argue that since these are common costs, they should be allocated uniformly so that each Ameritech business activity receives a fair and equal share of the general company overhead. Andersen's study, however, allocates common costs through a series of ratios. This process becomes even more complex when Andersen consolidates certain common costs in business units then reallocates out the discrete services. AT&T and MCI argue that neither Ameritech nor Andersen could provide any meaningful explanation as to why this complex allocation system was applied to common costs other than that is the method used by Ameritech for internal budgeting purposes. (AT&T/MCI Initial Joint Brief, p. 124). They maintain this is a discriminatory practice.

AT&T and MCI argue that a category of non-core telephone competitive businesses known as New Ventures have been excluded from the allocation process. (AT&T Cross Ex. 4; Tr. 777). Because of this exclusion, the ratio of non-core to core telephone activities has been decreased, thereby increasing the amount of common costs that ultimately are assigned to UNEs. (AT&T/MCI Initial Joint Brief p. 125). Another example of this discriminatory allocation methodology is, according to AT&T and MCI, that unbundled elements are ultimately assigned about 2.3% of all corporate common costs while Ameritech's overseas investments are allocated less than 1% of corporate common costs. (AT&T Cross Ex. 5, p. 20; MCI Cross Ex. 13P). In sum, AT&T and MCI conclude that if costs are truly common and cannot be assigned by use, then the allocation should be uniform and equal.

AT&T/MCI also object to the allocation methodology used by Andersen. The study distributes the forecasted pool of shared and common costs by using the ratio of extended TELRICs for loops over the extended TELRICs for all elements. They claim that the principal difficulty with such an approach is that this distribution method is critically dependent on the demand forecast for loops. Ameritech's demand forecasts are themselves suspect, according to AT&T and MCI, because neither Ameritech nor Andersen produced the demand forecast and did not even present a witness to explain and support the forecasted demand. (Id., p. 128; Tr. 786-87, 847).

Dr. Ankum opines that Ameritech's proposed allocations are not consistent with the competitive objectives of the Act and the FCC Order. As an example, he states that unbundled loops in business districts are burdened with higher markups for shared and common costs than their counterparts in more rural areas of the state. The percentage

markup for basic business loops in Rate Zone A is 4.9 times as large as the percentage markup for those same loops in Rate Zone C. Dr. Ankum therefore recommends a fixed percentage markup over TELRIC for all shared and common costs. (Id., pp. 90-92). Mr. Henson and Dr. Ankum observe that using a mark-up methodology for assigning shared and common costs to loops ensures that lower priced loops only bear their fair share of the shared and common costs. (AT&T/MCI Initial Joint Brief, pp. 130-31). Consequently, no fixed cost price barrier is erected to competitive entry.

While not advocating the use of the Andersen methodology in order to assign shared and common costs to UNEs, each of three witnesses for AT&T and MCI attempted to make adjustments to the Andersen methodology which they believed would bring it closer in line with the requirements of the 1996 Act, the FCC Order, and the Commission's local service rules. First, AT&T witness Henson proposed to remove retail-oriented costs by applying the 22% weighted average wholesale discount prescribed by the Commission in the Ameritech wholesale case (Docket 95-0458/0531 Cons.). He then suggests a method to convert Ameritech's 1997 accounting costs to "forward-looking economic costs efficiently incurred," using 55% of the total accounting costs incurred by Ameritech as a proxy for its forward-looking economic costs based on Ameritech's comments to the FCC in Docket 96-98. Then, using 30% as the markup Ameritech is proposing in this proceeding, he adjusts that amount down to 12.9% using the following formula:

30% x (1-22%) x 55% = 12.9%

(AT&T Ex. 1.0P, p. 62.)

Mr. Behounek, on behalf of both AT&T and MCI, also comments on the calculations of shared and common costs. Mr. Behounek recalculates the shared and common costs using Arthur Andersen's methodology and electronic spreadsheets (AT&T/MCI Joint Exhibit 6.0, p. 3). First, however, Mr. Behounek adjusts the starting budget amounts by annualizing 8 months of 1996 actual expense figures and using that calculated amount rather than the 1997 budget. His reasoning is that the 1997 budget was not forward looking, and since Ameritech chose not to use a forward-looking expense view, it was more reliable to use annualized 1996 numbers that contained at least a partial year of actual expenses. He also believes that 1996 expenses include costs associated with implementing the Act, will not occur on a regular basis, and are therefore higher than Ameritech would normally incur. He admits that the 1996 expenses are not forward-looking, reflect embedded expenses and in no way reflect long-term efficiencies. Further, he believes that by using actual expenses, he has conservatively accepted the framework that Ameritech has proposed without further overstating those figures in the manner suggested by Ameritech. (Id., p. 5). Finally, Mr. Behounek adjusts the 1996 budget projection by applying the Price Cap Index formula used by Ameritech Illinois for its annual Alternative Regulation rate filing. This formula, as used by Mr. Behounek, reduces the 1996 budget projection to develop a new base amount for 1997 in each of the four organizations. (Id., p. 6).